

NOTES ON SOME OF OSBORN'S MALLOPHAGA
TYPES AND THE DESCRIPTION OF A NEW GENUS,
ROTUNDICEPS (PHILOPTERIDAE)¹

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There is a small series of Herbert Osborn's Mallophaga types, comprising nine species, in the Museum of Comparative Zoology. These were described as new in his 1896 paper, *Insects Affecting Domestic Animals*.² I should like to express my indebtedness to the late Mr. James E. Peters, Curator of Birds, Museum of Comparative Zoology, who permitted me on numerous occasions to examine bird skins for lice to help determine the validity of host designations, and to Dr. Joseph Bequaert, Curator of Insects, for the loan of the type material. Mr. Louis Lipovsky, Department of Entomology, University of Kansas, supplied me with additional material. Dr. K. C. Emerson has given me many valuable suggestions concerning the material. A grant-in-aid from the Society of the Sigma Xi made it possible for me to complete this study.

The Osborn types are mounted on roughly cut thick glass slides, and many of them have cover glasses of the same material. The insects are in relatively good condition, although only partially cleared, and are undoubtedly those referred to in the descriptions. The type catalog numbers are contained in parentheses with the initials (MCZ).

Penenirmus tyrannus (Osborn)

Nirmus tyrannus Osborn, 1896, p. 228.

One slide with two females in fairly good condition (MCZ 27341).

¹ Published with a grant from the Museum of Comparative Zoology at Harvard College.

² 1896. U.S.D.A. Bull., No. 5 (N.S.).

Type host: *Tyrannus tyrannus* (Linn.), the Eastern Kingbird.

Philopterus fusco-ventralis (Osborn)

Docophorus fusco-ventralis Osborn, 1896, pp. 221-222.

Two slides containing seven adults and three immatures in good condition (MCZ 27342).

Type host: *Contopus virens* (Linn.), the Eastern Wood Pewee.

Philopterus osborni, nom. nov.

Docophorus corvi Osborn, 1896, pp. 220-221.

Three slides containing five adults and three immatures in good condition although uncleared. Since Clay and Hopkins³ have designated *Philopterus corvi* as the correct name for *Pediculus corvi* Linn. from *Corvus c. corax* Linn., Osborn's name must fall as a homonym (MCZ 27344).

Type host: *Corvus brachyrhynchus* Brehm, the Crow.

Quadriceps boophilus (Kellogg)

Nirmus boophilus Kellogg, 1896, New Mallophaga I, pp. 107-109.

Nirmus parallelus Osborn, 1896, pp. 229-230.

Three females on one slide, in good condition (MCZ 27336).

Type host: *Charadrius vociferus* Linn., the Killdeer.

Picicola marginatulus (Harrison)

Nirmus marginatus Osborn, 1896, p. 228.

Degeeriella marginatulus Harrison 1916, Parasitology 9, p. 117. Nomen novum.

One slide with three adult females in good condition (MCZ 27339).

Type host: *Dryocopus pileatus* (Linn.), the Pileated Woodpecker.

³ 1950. The Early Literature on Mallophaga. Bull. Brit. Mus. (Nat. Hist.), Ent. Ser., 1(3): 231-233, figs. 6-9.

Picicola orpheus (Osborn)

Nirmus orpheus Osborn 1896, pp. 227-228.

One slide containing two males, both of which are apparently terminating their last instar or are very recently adult. Dr. K. C. Emerson believes that they are possibly members of the genus *Lagopoecus*, while I believe they are more closely related to *Picicola* (as does Miss T. Clay, personal communication). This species is particularly difficult to determine since Osborn's host reference, *Galeoscoptes carolinensis*, presently *Dumatella carolinensis* (Linn.) is apparently incorrect. The genitalia certainly show affinities with *Picicola*. This species must remain an enigma until additional material is obtained. (MCZ 27340).

Type host: Yet to be determined, probably a woodpecker.

Bruelia abruptus (Osborn)

Nirmus abruptus Osborn, 1896, p. 229.

One adult female and an immature in good condition (MCZ 27338).

Type host: Unknown. The reference to *Colinus virginianus* (Linn.) is almost certainly incorrect. The louse has, in all probability, a passeriform host.

Rotundiceps gen. nov.

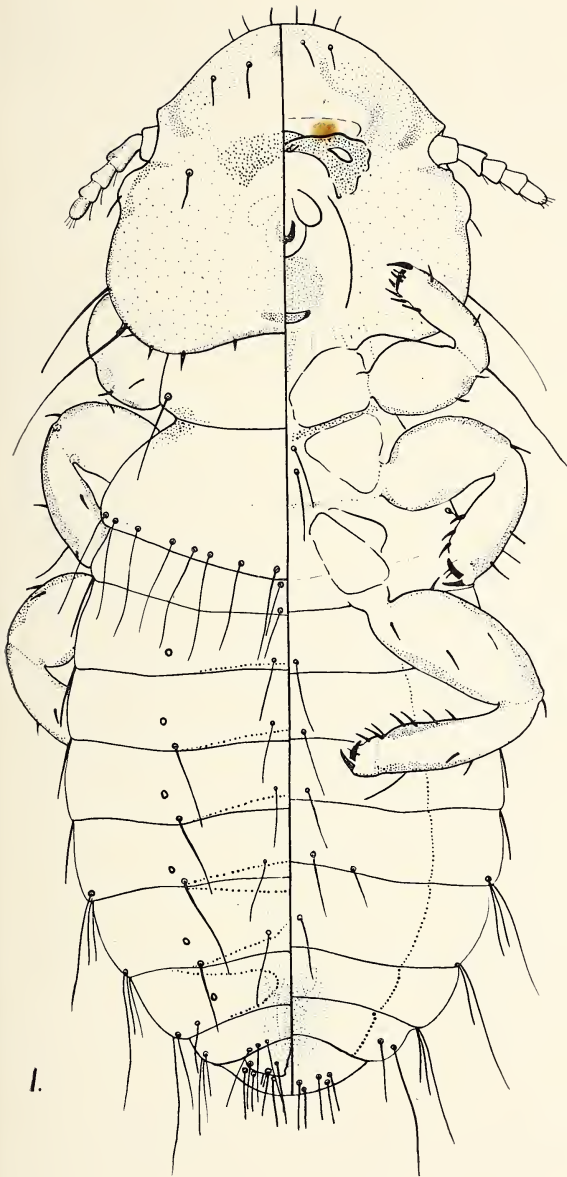
(Plate 3)

The genus is described for Osborn's *Nirmus cordatus*. It is closely related to *Lunaceps*, and is another example of ecological adaptation, *Lunaceps* frequenting the wings and back of the host while *Rotundiceps* is usually found about the head.

Description: Head broadly rounded, slightly broader than long, only slightly buttressed marginally. Relatively strongly buttressed around the bases of the antennae and mandibular articulations. Signature only barely repre-

EXPLANATION OF PLATE 3

- Fig. 1. Dorso-ventral view of male *Rotundiceps cordatus* Osborn.
Fig. 2. Male genitalia.



2.

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sented by small irregular sclerotized area. Posterior margin of head armed with short, stout setae. Rounded, lightly sclerotized gular area. Posterior margin of pterothorax with complete although irregular row of long setae. Abdomen slightly longer than broad, lightly sclerotized without obvious delineation of tergites and sternites. Spiracles six, on morphological segments 3-8. Mid-dorsal and mid-ventral double rows of setae on proximal seven segments. All spiracles except first and last with long seta posterior to each on border of tergite. In male, the first six tergites narrowed medially, with seventh separated into two parts, the eighth complete. Male genital opening dorso-terminal.

Genotype: *Nirmus cordatus* Osborn.

Type host: *Limosa fedoa* (Linn.), the Marbled Godwit. Although Osborn lists *L. haemastica* as the host in his text, I have failed to find any specimens in many collections from this bird. Collections from *L. fedoa* however contain abundant specimens of this louse. The type slide (MCZ 27337) label lists the host as *Limosa hudsonica*.

Rhynonirmus infuscatus (Osborn)

Lipeurus infuscatus Osborn, 1896, pp. 234-235.

The type material consists of three slides as follows: No. 340 with an adult female *Lunaceps*; No. 314 with an adult female *Rhynonirmus*; and No. 334 with two adult males, *Rhynonirmus*, from *Bartramia longicauda* (Bechstein). The male specimen centrally located in slide No. 334 is hereby designated as the lectotype (MCZ 27343).

Type host: *Bartramia longicauda*, the Upland Plover. The louse has been taken commonly from his host. Contrarywise, I failed to locate it in several collections from *Philohela minor* (Gmelin).